



# STIC Search Report

**EIC 3700**

STIC Database Tracking Number: 177671

**TO: James Swiger, III**

**Location: RND 6c04**

**Art Unit: 3733**

**Thursday, March 09, 2006**

**Case Serial Number: 10/721809**

**From: John Sims**

**Location: EIC 3700**

**RND 8B31**

**Phone: 571 272-3507**

**[john.sims@uspto.gov](mailto:john.sims@uspto.gov)**

## Search Notes

Here are the results for this search. Given the abstruse wording of the claims, I don't find a dead-on reference. I have attached patent and non-patent literature results for your appraisal.

**Solomon, Terrance**

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**From:** Swiger III, James L.  
**Sent:** Wednesday, January 25, 2006 1:10 PM  
**To:** STIC-EIC3700  
**Subject:** Database Search Request, Serial Number: 10/721 809

**Requester:**  
 JAMES SWIGER III (P/3733)

**Art Unit:**  
 GROUP ART UNIT 3733

**Employee Number:**  
 81582

**Office Location:**  
 RND 06C04

**Phone Number:**  
 (571)272-5557

**Mailbox Number:**  
 3733

**Case serial number:**  
 10/721 809

**Class / Subclass(es):**  
 606/80

**Earliest Priority Filing Date:**  
 11/25/2003

**Format preferred for results:**  
 Paper

**Search Topic Information:**  
 The case is directed to an orthopaedic reamer. *rotary*

Key items: has cutting teeth with a cutting edge between two side walls--so make sure it has three distinct sides in the cutting edge.

Also key: the radius of each segment has a "radius which is less than the radius of the distal face"

this has been the problem, because if you read the claims and spec, it seems like he is claiming the air space between the end of the cutting edge and the distal face, because at minimum the distal face would be made of the ends of the plurality of reamer blades.

However, Fig. 6 shows the punch tool, and Fig. 4 shows another view of the blade, which I feel he is measuring the radius from. Essentially it seems like the RADIUS that he mentions gets its dimensions from the cutting tool, shown in Fig. 6, and applies it only to the cutting tooth.

However, like I said earlier, it could also be interpreted as a whole radius of the distal face, taken from the center point of the reamer head to the edge (which is obviously much larger).

Let me know if you have any question, or if I need to explain this in person.

Special Instructions and Other Comments:

*Salyer, Paul E*

*ascan symmetry medical*

11/3,K/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

017030914 \*\*Image available\*\*

WPI Acc No: 2005-355232/200536

XRPX Acc No: N05-290071

Orthopedic rotary reamer used for plunge cuts, has cutting head having cutting teeth each having cutting edge provided with at least three segments each having radius that is smaller than radius of distal face of cutting head

Patent Assignee: SALYER P E (SALY-I)

Inventor: SALYER P E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20050113837	A1	20050526	US 2003721809	A	20031125	200536 B

Priority Applications (No Type Date): US 2003721809 A 20031125

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 20050113837	A1	6	A61B-017/16
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Orthopedic rotary reamer used for plunge cuts, has cutting head having cutting teeth each having cutting edge provided with at least three segments each having radius that is smaller than radius of distal face of cutting head

Inventor: SALYER P E

Abstract (Basic):

... Used for plunge cuts. For cutting bone to shape bone for receiving orthopedic implant...

...The figure is a side view of the orthopedic rotary reamer .

11/3,K/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

015524214 \*\*Image available\*\*

WPI Acc No: 2003-586362/200355

XRPX Acc No: N03-466949

Reamer for use by surgeons to prepare bones for receiving components of artificial joints has openings each having cutting edge that may be shaped as desired and which is isolated from periphery of corresponding opening

Patent Assignee: SALYER P E (SALY-I); WOLFORD T (WOLF-I); SYMMETRY MEDICAL USA INC (SYMM-N)

Inventor: SALYER P E ; WOLFORD T

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030135219	A1	20030717	US 200247946	A	20020114	200355 B
US 6730094	B2	20040504	US 200247946	A	20020114	200430

Priority Applications (No Type Date): US 200247946 A 20020114

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030135219 A1 11 A61B-017/32

US 6730094 B2 A61B-017/00

Reamer for use by surgeons to prepare bones for receiving components of artificial joints has openings each having cutting edge that may be shaped as desired and which is isolated from periphery of corresponding opening

Inventor: SALYER P E ...

Abstract (Basic):

... E.g. acetabular reamer, patella reamer, glenoid reamer, and for use by surgeons to prepare bones for receiving components of artificial joints...

... Maintains accurate cavity dimensions and smaller tolerances. Provides optimally shaped cutting edges that can be made to cut in shear. Enables saving of bone chips during operation. Provides reamer that can be stripped and sterilized for reuse, and which does not have crevices and other structures to hold bone chips and tissue which cannot...

11/3,K/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

013131045 \*\*Image available\*\*

WPI Acc No: 2000-302916/200026

XRPX Acc No: N00-226362

Surgical reamer for implanting patella prosthesis has drive shaft with quick release coupling for reaming head and depth limiter whose position is set relative to calibrated scale mounted on shaft

Patent Assignee: SULZER ORTHOPEDICS INC (SULZ ); BURKINSHAW B D (BURK-I); DYE D W (DYED-I); MENDENHALL B (MEND-I); SALYER P (SALY-I)

Inventor: BURKINSHAW B D; DYE D W; MENDENHALL B; SALYER P

Number of Countries: 023 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200013595	A1	20000316	WO 99US20434	A	19990907	200026 B
AU 9957054	A	20000327	AU 9957054	A	19990907	200032
US 6277121	B1	20010821	US 98150125	A	19980909	200150

Priority Applications (No Type Date): US 98150125 A 19980909

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200013595 A1 E 30 A61B-017/16

Designated States (National): AU CA JP KR

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

AU 9957054 A A61B-017/16 Based on patent WO 200013595

US 6277121 B1 A61B-017/00

... Inventor: SALYER P

Abstract (Basic):

... 24) and a quick release coupling (18) with tabs that mate with L-shaped slots (86) on the side of the reaming head (22). The reaming head has raised blades (93) with adjacent bone scoops (94) and a central hole (98) for the drill. Depth limiter (20) is mounted on the shaft and a tooth engages calibrated notches on...

11/3,K/4 (Item 4 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

011073808 \*\*Image available\*\*  
WPI Acc No: 1997-051732/199705  
XRPX Acc No: N97-042553

Method for making acetabular reamer - involves fabricating bowl shaped cup-blank, perforating holes through, deforming outer surface and finally forming curved cutting edges

Patent Assignee: SALYER P E (SALY-I); SYMMETRY MEDICAL USA INC (SYMM-N); OTHY INC (OTHY-N)

Inventor: SALYER P E

Number of Countries: 021 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9639951	A1	19961219	WO 96US8904	A	19960605	199705 B
US 5709688	A	19980120	US 95473371	A	19950607	199810
EP 900052	A1	19990310	EP 96917180	A	19960605	199914
			WO 96US8904	A	19960605	
US 6001105	A	19991214	US 95473371	A	19950607	200005
			US 988723	A	19980119	
US 6428543	B1	20020806	US 95473371	A	19950607	200254
			US 988723	A	19980119	
			US 99374034	A	19990813	
EP 900052	B1	20050803	EP 96917180	A	19960605	200552
			WO 96US8904	A	19960605	
DE 69635031	E	20050908	DE 96635031	A	19960605	200561
			EP 96917180	A	19960605	
			WO 96US8904	A	19960605	

Priority Applications (No Type Date): US 95473371 A 19950607; US 988723 A 19980119; US 99374034 A 19990813

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9639951 A1 E 20 A61B-017/14

Designated States (National): CA JP

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

US 5709688 A 7 A61B-017/00

EP 900052 A1 E A61B-017/14 Based on patent WO 9639951

Designated States (Regional): CH DE ES FR GB IE IT LI

US 6001105 A A61B-017/00 Div ex application US 95473371

Div ex patent US 5709688

US 6428543 B1 A61B-017/00 Div ex application US 95473371

Div ex application US 988723

Div ex patent US 5709688

Div ex patent US 6001105

EP 900052 B1 E A61B-017/14 Based on patent WO 9639951

Designated States (Regional): CH DE ES FR GB IE IT LI

DE 69635031 E A61B-017/14 Based on patent EP 900052  
Based on patent WO 9639951

Inventor: **SALYER P E**

...Abstract (Basic): capable of more accurate cavity dimensions and smaller tolerances, improved method for making same, and minimizes thermal osteonecrosis and an improved method for making which **reamer** cuts faster and requires less force against **bone** than prior acetabular cups, and improved method for making same...

...Abstract (Equivalent): capable of more accurate cavity dimensions and smaller tolerances, improved method for making same, and minimizes thermal osteonecrosis and an improved method for making which **reamer** cuts faster and requires less force against **bone** than prior acetabular cups, and improved method for making same...

11/3,K/5 (Item 5 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

009829271 \*\*Image available\*\*

WPI Acc No: 1994-109127/199413

Related WPI Acc No: 1992-131312

XRPX Acc No: N94-085328

**Disposable surgical cutters - has number of cutting edges and perforations adjoining cutting edges**

Patent Assignee: OTHY INC (OTHY-N)

Inventor: **SALYER B D; SALYER P E**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5299893	A	19940405	US 91668926	A	19910313	199413 B
			US 92858934	A	19920327	

Priority Applications (No Type Date): US 92858934 A 19920327; US 91668926 A 19910313

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5299893	A	10	A61B-017/16	CIP of application US 91668926
				CIP of patent US 5100267

...Inventor: **SALYER P E**

...Abstract (Basic): USE - As acetabular reamer cups and patella **cutters** e.g. for **cutting** cavities in pelvis **bones** for insertion of artificial hip joint...

6/3,K/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

017508161 \*\*Image available\*\*

WPI Acc No: 2006-019398/200602

XRXPX Acc No: N06-017032

Rotary reamer for forming cavity in bones, has flexible shaft and cutting head comprising forward cutting edges, reverse cutting edges flutes and cutting teeth

Patent Assignee: GARBER T (GARB-I); KNISELY B (KNIS-I)

Inventor: GARBER T; KNISELY B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20050283160	A1	20051222	US 2004556347	P	20040325	200602 B
			US 200590719	A	20050325	

Priority Applications (No Type Date): US 2004556347 P 20040325; US 200590719 A 20050325

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20050283160	A1	6	A61B-017/16	Provisional application US 2004556347

Rotary reamer for forming cavity in bones, has flexible shaft and cutting head comprising forward cutting edges, reverse cutting edges flutes and cutting teeth

Abstract (Basic):

... The rotary reamer (10) has a flexible shaft (12) and a cutting head (14) comprising forward cutting edges (16), reverse cutting edges (36), flutes and cutting teeth (20). The cutting head has rear reamer portion (22) with cutting teeth (28), forward reamer portion (24) with connecting teeth (30) and mid-reamer portion (26) with recess (32).

... Reduces the temperature of the cutting operation by reducing friction between reamer and bone. Reduces thermal necrosis of the bone. Ensures easy cleaning of the canal formed in the bone...

...The figure shows a side view of the rotary reamer...

... rotary reamer (10...

...cutting teeth (20...

...cutting teeth (28...

...connecting teeth (30

6/3,K/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

017030914 \*\*Image available\*\*

WPI Acc No: 2005-355232/200536

XRXPX Acc No: N05-290071

Orthopedic rotary reamer used for plunge cuts, has cutting head having cutting teeth each having cutting edge provided with at least three segments each having radius that is smaller than radius of distal face of cutting head

Patent Assignee: SALYER P E (SALY-I)

Inventor: SALYER P E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20050113837	A1	20050526	US 2003721809	A	20031125	200536 B

Priority Applications (No Type Date): US 2003721809 A 20031125

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20050113837	A1	6	A61B-017/16	

Orthopedic rotary reamer used for plunge cuts, has cutting head having cutting teeth each having cutting edge provided with at least three segments each having radius that is smaller than radius of distal face of cutting head

Abstract (Basic):

... A cutting head (14) coupled with a shaft (12) has a distal face (22) on which cutting teeth (24) are formed. Each cutting tooth has a pair of opposed sidewalls in between which extends a cutting edge. The cutting edge has at least three adjoining segments, with each segment having a radius that is less than the radius of the distal face.  
... The figure is a side view of the orthopedic rotary reamer .

...

...Cutting teeth (24)

...Title Terms: RADIUS ;

6/3,K/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

015840398 \*\*Image available\*\*

WPI Acc No: 2003-902602/200382

XRPX Acc No: N03-720904

Low-profile acetabular reamer used in orthopedic surgery , has convex cutting surface with truncated opposing sides, cutting teeth disposed on cutting surface, and attachment portion that releasably attaches reamer to spinning device

Patent Assignee: COOK K (COOK-I); MCCALLUM K (MCCA-I)

Inventor: COOK K; MCCALLUM K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030220647	A1	20031127	US 2002153053	A	20020521	200382 B

Priority Applications (No Type Date): US 2002153053 A 20020521

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030220647	A1	6	A61B-017/32	

Low-profile acetabular reamer used in orthopedic surgery , has convex cutting surface with truncated opposing sides, cutting teeth disposed on cutting surface, and attachment portion that releasably attaches reamer to spinning device

Abstract (Basic):

... The reamer has a convex cutting surface (10) that has a hemispherical shape having truncated opposing sides (13,14). Cutting **teeth** are disposed on the cutting surface. An attachment portion releasably attaches the reamer to a spinning device.  
... a traditional reamer of similar cutting size, and that is capable of fitting through a small incision than a fully hemispherical reamer of equivalent cutting **radius** .

6/3,K/4 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

013327339 \*\*Image available\*\*  
WPI Acc No: 2000-499278/200044  
XRPX Acc No: N00-370061

**Cutting head for surgical reamers to enlarge bore of central medullary canal of bone, connects to shaft to form length from leading tip to trailing end, and has flutes extending predetermined distance along length around circumference**

Patent Assignee: EDWARDS G U (EDWA-I); KRAUSE W R (KRAU-I)

Inventor: EDWARDS G U; KRAUSE W R

Number of Countries: 084 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200044291	A1	20000803	WO 2000US2431	A	20000128	200044 B
AU 200026357	A	20000818	AU 200026357	A	20000128	200057
US 6258093	B1	20010710	US 99118024	P	19990201	200141
			US 2000494108	A	20000128	
EP 1253862	A1	20021106	EP 2000904630	A	20000128	200281
			WO 2000US2431	A	20000128	

Priority Applications (No Type Date): US 99118024 P 19990201; US 2000494108  
A 20000128

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200044291 A1 E 34 A61B-017/16

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200026357 A A61B-017/16 Based on patent WO 200044291

US 6258093 B1 A61B-019/00 Provisional application US 99118024

EP 1253862 A1 E A61B-017/16 Based on patent WO 200044291

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

**Cutting head for surgical reamers to enlarge bore of central medullary canal of bone, connects to shaft to form length from leading tip to trailing end, and has flutes extending predetermined distance along length around circumference**

Abstract (Basic):

... a predetermined distance along the length around it's circumference. The flutes are formed by grooves extending in patterns a predetermined distance along the length. **Teeth** (3.09) are placed along the flute length and can be formed from a sinusoidal path

comprised of a continuous **radius** going from convex to concave.  
... have a constantly changing path. A second pattern can follow a second, contiguous hollow path that has a second radial orientation to the axis. Each **teeth** has a predetermined pitch from the crest to the base...  
...For **surgical reamers** used by **surgeons** during intramedullary reaming and other **orthopedic** procedures requiring the internal enlargement of central canals of bones, such as the femur, tibia, and humerus...  
...1) reduces the cutting force and increases the depth of cut or cutting length which can be obtained with the **reamer** head, thus reducing the number of **reamers** needed during the **surgical** procedure, reducing hospital inventory cost, and reducing operative time of the procedure  
...  
...2) counter acts the tendency of a high helix angle **cutter** to dig in or cut into the **bone** without clearing away the produced chips or debris  
...  
... **Teeth** (3.09)

6/3,K/5 (Item 5 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

012588330 \*\*Image available\*\*  
WPI Acc No: 1999-394437/199933  
XRPX Acc No: N99-294820

Cutter **shaft structure of detachable grinder head used in bone grinder**  
Patent Assignee: G & G TECHNOLOGIES INC (GGTE-N)  
Inventor: CARTER K; GROOMS J M; SCHNEIDER R T  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applcat No Kind Date Week  
US 5918821 A 19990706 US 96683948 A 19960719 199933 B

Priority Applications (No Type Date): US 96683948 A 19960719  
Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 5918821 A 24 B02C-019/12

Cutter **shaft structure of detachable grinder head used in bone grinder**

Abstract (Basic):

... **shaft** (63) with several duck bill shaped blades or tooth (64) is rotatably arranged within the stable chute. The blades are arranged intermittently with varying **radius**. A motor drives the shaft such that blades pass through the recesses in the grating (65) during grinding of bone.  
... The chute is slidably arranged in the housing, to receive the **bone** material. The drive shaft of motor is coupled with the **cutter** shaft through couplings. The ground **bone** is received in a disposable cup, connected to a safety interlock. The **radius** of the blades is set to be 0.66, 5divide16, 0.097 and 7divide32 inches at varying sections respectively. An INDEPENDENT CLAIM is also included...

Technology Focus:

... The blade or **teeth** of cutter shaft is made of 440C stainless steel.

**6/3,K/6 (Item 6 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

007635324 \*\*Image available\*\*

WPI Acc No: 1988-269256/198838

XRPX Acc No: N88-204282

Rotary bone cutter - **has conical working section with slits which are bent in towards base**

Patent Assignee: MEDINSTRUMENT (MEDI-R)

Inventor: ORENBUROV P Y A; REPIN V A; TUPIKOV M S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1378824	A	19880307	SU 4136793	A	19861021	198838 B

Priority Applications (No Type Date): SU 4136793 A 19861021

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
SU 1378824	A	3		

Rotary bone cutter -

...Abstract (Basic): The **bone cutter** has a hollow conical working section (1) with **teeth** and slits adjoining them and a base with shank. The edges of the slits are bent inwards and towards the base (4). The part (7...)

...ADVANTAGE - This construction of the **bone cutter** keeps the shaving out of the operation field. Bul.9/7.3.88...

**6/3,K/7 (Item 7 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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004436236

WPI Acc No: 1985-263114/198542

XRPX Acc No: N85-196734

**Dental implant and tool for prosthesis fastening - cuts opening in jaw bone and is then left in place to support false tooth etc.**

Patent Assignee: SCORTECCI G (SCOR-I)

Inventor: SCORTECCI G

Number of Countries: 035 Number of Patents: 013

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8504321	A	19851010	WO 85FR64	A	19850329	198542 B
FR 2561907	A	19851004				198546
AU 8541506	A	19851101				198607
NO 8504787	A	19860210				198613
DK 8505493	A	19860123				198647
EP 214962	A	19870325	EP 85901464	A	19850329	198712
FI 8603923	A	19860929				198727
US 4722687	A	19880202	US 86810370	A	19860523	198808
US 4789337	A	19881206	US 87139257	A	19871229	198851

US 4815974	A	19890328	US 87139258	A	19871229	198915
CA 1267307	A	19900403				199018
EP 214962	B	19900606				199023
DE 3578037	G	19900712				199029

Priority Applications (No Type Date): FR 845129 A 19840329

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 8504321	A	F	24	
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Designated States (National): AU BG DK FI JP KP LK MC MG MW NO RO SD SU US

Designated States (Regional): AT BE CF CG CH CM DE GB IT LI LU ML MR NL SE SN TD TG

EP 214962	A	F	
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Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

EP 214962	B		
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Designated States (Regional): AT BE CH DE GB IT LI LU NL SE

...Abstract (Basic): be fitted. The implant (1) is in the form of a shaft (2) with an integrally formed disc (3) at one end. The disc has **teeth** arranged around its periphery, whilst additional **teeth** (22) are formed on the shaft (2...).

...Abstract (Equivalent): milling cutter active also in the lateral direction and ending in one or several portion(s) (3) vertically of the longitudinal axis, serving as a **rotary** milling cutter (5), whereby it is possible with said implant tool (1) to effect a micro-osteotomy simultaneously in the horizontal plane and in the...

...Abstract (Equivalent): large wheel and from each other along the shaft. The cutting is effected by moving the shaft normal to its axis so that the fla **cutter** wheel moves into the jaw **bone** while remaining in a single plane...

...wheels spaced apart along the shaft. The large wheel of the implant has a thickness slightly greater than that of the large wheel of the **cutter** wheel. Hence the implant is wedged in the jaw **bone**, the placing of the implant being effected by moving the implant shaft normal to its axis so that the large dia. wheel moves into the...

...A flat circular wheel has cutting **teeth** on its periphery. The wheel has a diameter that is several times its thickness. An elongated shaft is secured coaxially to the wheel and has milling...

6/3,K/8 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

002142513

WPI Acc No: 1979-G2449B/197929

Bone hollow rotary cutter - has right angled trapezoidal teeth with small inclination angle to avoid bone burning

Patent Assignee: SAMOILOV A G (SAMO-I)

Inventor: FURMAN M E; YUMASHEV G S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 625699	A	19780817				197929 B

Priority Applications (No Type Date): SU 2375910 A 19760625

Bone **hollow rotary cutter** - ...

...has right angled trapezoidal teeth with small inclination angle to avoid bone burning

...Abstract (Basic): Burns on the cut bone are avoided, and healing is accelerated with fast union of the transplant using a cutter with right-angled trapeze **teeth**. The inclination of the trapeze is 3-7 deg., and the cross section of the **teeth** is an equilateral trapeze. The bearing surface of the **teeth** amounts to 60-70% of the end section of the cutter. The cutting edge of **teeth** (2) of the hollow **rotary cutter** (1) is 0.1-0.2 mm greater than the thickness of the cutter body.

6/3,K/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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000809144

WPI Acc No: 1971-50835S/197131

Rotary **cutter for boning meat**

Patent Assignee: SCHLUMBERGER & CIE N (SLMB )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2053445	A				197131	B

Priority Applications (No Type Date): FR 6922744 A 19690704

Rotary **cutter for boning meat**

...Abstract (Basic): Helical- **toothed** cutter has a helix angle of 30 degrees-60 degrees, either right- or left-handed. A tooth pitch of 20 - 35 mm.; a tooth back relief angle of 5 degrees-12 degrees, and well rounded roots and backs to the **teeth**. When this cutter is operated at a peripheral speed of 200-450 min-1, the cutting of either raw or cooked **bone** is effected without splintering, choking of the **cutter teeth** or overheating the meat. Consequently, the meat is **boned** without injury or discolouration.

?

14/3,K/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

015840398 \*\*Image available\*\*

WPI Acc No: 2003-902602/200382

XRPX Acc No: N03-720904

**Low-profile acetabular reamer used in orthopedic surgery, has convex cutting surface with truncated opposing sides, cutting teeth disposed on cutting surface, and attachment portion that releasably attaches reamer to spinning device**

Patent Assignee: COOK K (COOK-I); MCCALLUM K (MCCA-I)

DWP

Inventor: COOK K; MCCALLUM K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030220647	A1	20031127	US 2002153053	A	20020521	200382 B

Priority Applications (No Type Date): US 2002153053 A 20020521

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030220647 A1 6 A61B-017/32

**Low-profile acetabular reamer used in orthopedic surgery, has convex cutting surface with truncated opposing sides, cutting teeth disposed on cutting surface, and attachment portion that releasably attaches reamer to spinning device**

Abstract (Basic):

... The reamer has a convex cutting surface (10) that has a hemispherical shape having truncated opposing sides (13,14). Cutting teeth are disposed on the cutting surface. An attachment portion releasably attaches the reamer to a spinning device.

... Used in orthopedic **surgery**. Used in traditional and minimally invasive **surgical** procedures...

...a traditional reamer of similar cutting size, and that is capable of fitting through a small incision than a fully hemispherical reamer of equivalent cutting **radius**.

...Title Terms: **SURGICAL** ;

14/3,K/2 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

015574307 \*\*Image available\*\*

WPI Acc No: 2003-636464/200360

XRPX Acc No: N03-506365

**Orthopedic reamer for processing and cutting bone that receives orthopedic implant, has head distal face provided with plural cutting teeth and at least one viewing window, in which viewing window extends through head**

Patent Assignee: HATHAWAY R W (HATH-I)

Inventor: HATHAWAY R W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030163135	A1	20030828	US 200280490	A	20020222	200360 B

Priority Applications (No Type Date): US 200280490 A 20020222

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 20030163135 A1 4 A61B-017/16

Orthopedic reamer for processing and cutting bone that receives orthopedic implant, has head distal face provided with plural cutting teeth and at least one viewing window, in which viewing window extends through head

Abstract (Basic):

... The reamer (10) has a shaft (12) coupled to a head (14). The head has a distal face (22) with plural cutting teeth (24) and at least one viewing window, in which the viewing window extends through the head.

... Allows surgeon to view bone while being cut during surgical procedure...

...The figure shows the side view of the **orthopedic reamer**.  
**Orthopedic reamer** (10...).

...Cutting teeth (24)

**14/3,K/3 (Item 3 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

015330197 \*\*Image available\*\*

WPI Acc No: 2003-391132/200337

Related WPI Acc No: 1995-066296; 2000-181597; 2002-706451; 2004-709140

XRPX Acc No: N03-312385

Surgical saw blade for cutting bone during surgery, has distal end having even-numbered, identically-shaped cutting teeth that contact bone to be cut to provide better tracking of surgical saw blade when forming kerf in bone

Patent Assignee: SYNVASIVE TECHNOLOGY INC (SYNV-N)

Inventor: FISHER M G; FLETCHER H H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6503253	B1	20030107	US 93153871	A	19931116	200337 B
			US 2000499803	A	20000208	

Priority Applications (No Type Date): US 93153871 A 19931116; US 2000499803 A 20000208

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 6503253 B1 10 A61B-017/00 Cont of application US 93153871  
Cont of patent US 6022353

Surgical saw blade for cutting bone during surgery, has distal end having even-numbered, identically-shaped cutting teeth that contact bone to be cut to provide better tracking of surgical saw blade when forming kerf in bone

Abstract (Basic):

... The **surgical** saw blade (10) has a proximal end (12) having a hub (22) for attachment to an oscillatory power tool for driving

engagement, and a distal end (8) having even-numbered, identically-shaped cutting **teeth** (2) ending in the distal tip (6). The **teeth** contact the bone to be cut to provide better tracking of the **surgical** saw blade when forming a kerf in the bone.

... from the centerline of the power tool cutting axis. The power tool cutting axis bisects the arc of travel within which the blade travels. The **teeth** cut both progressively and sequentially as the kerf begins to form to provide faster aggressive cutting and efficient chip removal. An INDEPENDENT CLAIM is also included for the combination of the **surgical** bone saw and **bone** saw blade...

...For cutting bone during **surgery** .

...

...to kick and rotate and ensuring better bone chip evacuation which reduces operating temperature of saw adjacent the cut. Minimizes heat build-up associated with **surgical** cutting to reduce thermal necrosis that attends cutting bone. Minimizes backlash and kick that the surgeon experiences when using traditional blades. Ensures durable construction and...

...The figure shows the top plan view of the **surgical** saw blade...

...Cutting **teeth** (2...

... **Surgical** saw blade (10

Title Terms: **SURGICAL** ;

14/3,K/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

014574968 \*\*Image available\*\*  
WPI Acc No: 2002-395672/200243

XRPX Acc No: N02-310197

**Surgical tool for removing bone and cartilage material and preparing bones for implantation has recesses between cutting teeth at end of hollow shaft**

Patent Assignee: CORIPHARM MEDIZINPRODUKTE GMBH & CO KG (CORI-N)

Inventor: BAUER J; LAPRELL H G; BAUER H J

Number of Countries: 022 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10048575	A1	20020411	DE 1048575	A	20000930	200243 B
WO 200236022	A1	20020510	WO 2001EP10631	A	20010914	200243

Priority Applications (No Type Date): DE 1048575 A 20000930

Patent Details:

Patent No	Kind	Land	Pg	Main IPC	Filing Notes
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DE 10048575	A1	8		A61B-017/16	
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WO 200236022	A1	G		A61B-017/16	
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Designated States (National): CN JP US

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE TR

**Surgical tool for removing bone and cartilage material and preparing bones for implantation has recesses between cutting teeth at end of hollow shaft**

Abstract (Basic):

... In the end region of the hollow cylindrical shaft of a cutting tool, on the processing surface side, a number of cutting **teeth** (20) are evenly distributed around the face surface, and have radial cutting edges. Between respective cutting **teeth**, recesses are provided for receiving and removing the **bone** or cartilage material.

... Hand-held tool for restorative bone **surgery** and orthopedics, especially bone transplants...

Title Terms: **SURGICAL** ;

**14/3,K/5 (Item 5 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

014055488 \*\*Image available\*\*  
WPI Acc No: 2001-539701/200160

XRPX Acc No: N01-401110

Punching stopper used with punching tool for bone surgery, has taper in second stopper body to act against ball of first stopper body by force that depends on degree of screw between stopper bodies

Patent Assignee: HOMUZU GIKEN KK (HOMU-N)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001212151	A	20010807	JP 200026016	A	20000203	200160 B
JP 3392092	B2	20030331	JP 200026016	A	20000203	200325

Priority Applications (No Type Date): JP 200026016 A 20000203

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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JP 2001212151 A 7 A61B-017/16

JP 3392092 B2 7 A61B-017/16 Previous Publ. patent JP 2001212151

Punching stopper used with punching tool for bone surgery, has taper in second stopper body to act against ball of first stopper body by force that depends on degree of screw between stopper bodies

Abstract (Basic):

... The balls engage the connection grooves (22d) on the periphery of the **reamer** shaft. An INDEPENDENT CLAIM is also included for a **punching** tool for **bone** **surgery** .

...

...For use with **punching** tool for bone **surgery** .

...

...The figure shows the exploded isometric view of a **punching** tool

Title Terms: **PUNCH** ;

**14/3,K/6 (Item 6 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
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013972258 \*\*Image available\*\*

WPI Acc No: 2001-456471/200149

XRPX Acc No: N01-338244

Orthopaedic glenoid reamer, has a visualization groove on the cutting head which extends radially inwards from the radial perimeter

Patent Assignee: BRISTOL-MYERS SQUIBB CO (BRIM )

Inventor: ALLARD R N; MEYERS J E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6245074	B1	20010612	US 99388136	A	19990901	200149 B

Priority Applications (No Type Date): US 99388136 A 19990901

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6245074	B1	10	A61B-017/14	

**Orthopaedic glenoid reamer , has a visualization groove on the cutting head which extends radially inwards from the radial perimeter**

Abstract (Basic):

... The **orthopaedic reamer** includes an elongate shaft (12) and a cutting head (14) attached to an end of the shaft. The cutting head has a diameter which is larger than the shaft. The cutting head has a radial perimeter and an axial cutting face (28) with a number of cutting **teeth** (24). The cutting head has at least one visualization groove (30) which extends radially inward from the radial perimeter. The visualization groove allows a surgeon to visualize the cut **bone** during **surgery** .

... Allows the surgeon to adequately inspect the glenoid surface during a cutting operation without removing the **reamer** from the **bone**

...

... **teeth** (24

14/3,K/7 (Item 7 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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013491227 \*\*Image available\*\*

WPI Acc No: 2000-663170/200064

XRPX Acc No: N00-491285

**Surgical cutting tool**

Patent Assignee: FEDOTOV V M (FEDO-I); GALKIN S G (GALK-I); SIMERNITSKII B P (SIME-I)

Inventor: FEDOTOV V M; GALKIN S G; SIMERNITSKII B P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RU 2150904	C1	20000620	RU 98117424	A	19980915	200064 B

Priority Applications (No Type Date): RU 98117424 A 19980915

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
RU 2150904	C1		A61B-017/32	

**Surgical cutting tool**

Abstract (Basic):

... Tool may be used for removal of normal and pathologically changed tissues (bones, cartilages, ligaments, cicatrices). The **surgical cutting tool** has longitudinal body accommodating hollow cutting member and handles. One handle is fixed immovably to body,

while the other, is movable and hinged to body...

...end of hollow cutting member has circular stops for return with reciprocating moving and engagement with movable handle. External cylindrical surface of stops has inclined **teeth** engageable with inclined **teeth** made on longitudinal body. The other end of hollow cutting member has cutting edge whose internal conical surface is made fro compression of removable particles...

...prevention of their falling out into operation wound and its contamination. Crown in cutting is engageable with coaxial protrusion on longitudinal body. As a result, **tool** is made for **cutting bone** or cartilage tissue, particularly, in removal of falling out of intervertebral disc and ensuring higher productivity due to application of only one tool with rapid...

...from fragments of removed tissue and reduction of load exerted on surgeon's hand, high purity of cutting out line and excluded load on treated **bone** in cutting out of its fragments under conditions of narrow operation field.

Title Terms: **SURGICAL** ;

**14/3,K/8 (Item 8 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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013327339 \*\*Image available\*\*

WPI Acc No: 2000-499278/200044

XRPX Acc No: N00-370061

**Cutting head for surgical reamers to enlarge bore of central medullary canal of bone, connects to shaft to form length from leading tip to trailing end, and has flutes extending predetermined distance along length around circumference**

Patent Assignee: EDWARDS G U (EDWA-I); KRAUSE W R (KRAU-I)

Inventor: EDWARDS G U; KRAUSE W R

Number of Countries: 084 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200044291	A1	20000803	WO 2000US2431	A	20000128	200044 B
AU 200026357	A	20000818	AU 200026357	A	20000128	200057
US 6258093	B1	20010710	US 99118024	P	19990201	200141
			US 2000494108	A	20000128	
EP 1253862	A1	20021106	EP 2000904630	A	20000128	200281
			WO 2000US2431	A	20000128	

Priority Applications (No Type Date): US 99118024 P 19990201; US 2000494108 A 20000128

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200044291 A1 E 34 A61B-017/16

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200026357 A A61B-017/16 Based on patent WO 200044291

US 6258093 B1 A61B-019/00 Provisional application US 99118024

EP 1253862 A1 E A61B-017/16 Based on patent WO 200044291

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

**Cutting head for surgical reamers to enlarge bore of central medullary canal of bone, connects to shaft to form length from leading tip to trailing end, and has flutes...**

Abstract (Basic):

... a predetermined distance along the length around it's circumference. The flutes are formed by grooves extending in patterns a predetermined distance along the length. **Teeth** (3.09) are placed along the flute length and can be formed from a sinusoidal path comprised of a continuous **radius** going from convex to concave.

... have a constantly changing path. A second pattern can follow a second, contiguous hollow path that has a second radial orientation to the axis. Each **teeth** has a predetermined pitch from the crest to the base...

...For **surgical** reamers used by surgeons during intramedullary reaming and other orthopedic procedures requiring the internal enlargement of central canals of bones, such as the femur, tibia...

...increases the depth of cut or cutting length which can be obtained with the reamer head, thus reducing the number of reamers needed during the **surgical** procedure, reducing hospital inventory cost, and reducing operative time of the procedure...

...2) counter acts the tendency of a high helix angle **cutter** to dig in or cut into the **bone** without clearing away the produced chips or debris

...

... **Teeth** (3.09)

...Title Terms: **SURGICAL** ;

**14/3,K/9 (Item 9 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

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012637410 \*\*Image available\*\*

WPI Acc No: 1999-443514/199937

XRPX Acc No: N99-330789

**Combination orthopedic surgical broaching and reaming tool**  
Patent Assignee: STRYKER TECHNOLOGIES CORP (STRY-N)

Inventor: RALPH C R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5931841	A	19990803	US 9866243	A	19980424	199937 B

Priority Applications (No Type Date): US 9866243 A 19980424

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5931841	A	9		A61B-017/16	

**Combination orthopedic surgical broaching and reaming tool**

Abstract (Basic):

... The tool (50) has a cylindrical part with a proximal shank portion (52) adapted to internally receive a handle (62), axially

spaced parallel broaching **teeth** (54), and reaming **teeth** (56). The reaming **teeth** transect at least some of the broaching **teeth**.  
... Broaching **teeth** (54...)

...Reaming **teeth** (56...  
...Title Terms: **SURGICAL** ;

14/3, K/10 (Item 10 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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012588330 \*\*Image available\*\*  
WPI Acc No: 1999-394437/199933  
XRPX Acc No: N99-294820

Cutter **shaft structure of detachable grinder head used in bone grinder**

Patent Assignee: G & G TECHNOLOGIES INC (GGTE-N)

Inventor: CARTER K; GROOMS J M; SCHNEIDER R T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5918821	A	19990706	US 96683948	A	19960719	199933 B

Priority Applications (No Type Date): US 96683948 A 19960719

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5918821	A	24	B02C-019/12	

Cutter **shaft structure of detachable grinder head used in bone grinder**

Abstract (Basic):

... A **cutter** shaft (63) with several duck bill shaped blades or tooth (64) is rotatably arranged within the stable chute. The blades are arranged intermittently with varying **radius**. A motor drives the shaft such that blades pass through the recesses in the grating (65) during grinding of **bone**.

... The chute is slidably arranged in the housing, to receive the **bone** material. The drive shaft of motor is coupled with the **cutter** shaft through couplings. The ground **bone** is received in a disposable cup, connected to a safety interlock. The **radius** of the blades is set to be 0.66, 5divide16, 0.097 and 7divide32 inches at varying sections respectively. An INDEPENDENT CLAIM is also included for **bone** grinding method...

...For bone grinder used in tissue banking and transparent **surgery** and also for grinding bones in ribs, iliac, crests, ilium, metaphysical regions and for orthopedic, maxillofacial, periodontal and neurosurgical applications...

Technology Focus:

... The blade or **teeth** of cutter shaft is made of 440C stainless steel.

14/3,K/11 (Item 11 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012335650 \*\*Image available\*\*

WPI Acc No: 1999-141757/199912

Related WPI Acc No: 1993-359610; 1995-005655; 1995-035561; 1995-097969; 1995-097970; 1995-263686; 1995-392501; 1996-267666; 1997-548835; 1998-480293; 2001-513988; 2003-167054; 2005-281934

XRPX Acc No: N99-103045

**Coring reamer for use in removing bone core for use in graft - has series of cutting teeth projecting from distal end of hollow tube, with chamber within tube for receiving solid core**

Patent Assignee: MCGUIRE D A (MCGU-I)

Inventor: MCGUIRE D A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5865834	A	19990202	US 91806906	A	19911213	199912 B
			US 92839466	A	19920219	
			US 92956733	A	19921002	
			US 94180956	A	19940113	
			US 94347578	A	19941130	
			US 95475015	A	19950607	

Priority Applications (No Type Date): US 95475015 A 19950607; US 91806906 A 19911213; US 92839466 A 19920219; US 92956733 A 19921002; US 94180956 A 19940113; US 94347578 A 19941130

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5865834	A	13	A61B-017/00	CIP of application US 91806906
				CIP of application US 92839466
				CIP of application US 92956733
				CIP of application US 94180956
				CIP of application US 94347578
				CIP of patent US 5257996
				CIP of patent US 5391170

**Coring reamer for use in removing bone core for use in graft...**

**...has series of cutting teeth projecting from distal end of hollow tube, with chamber within tube for receiving solid core**

**...Abstract (Basic):** The coring reamer (130) comprises a series of cutting teeth (134) projecting from a distal end of the hollow tube, the tube having a chamber devoid of internal structure within it for receiving a solid core. Between any two adjacent cutting teeth in the series of cutting teeth one tooth is bent in a direction in toward a longitudinal axis of the tube and the other tooth is bent in a direction out...

**...provided through a wall of the tube so that a pushing member may be inserted through the slot to push the core cut by the reamer out from within the hollow tube. The coring reamer is used by aiming a cylindrical tunnel at a bone, inserting the reamer through the cylindrical tunnel and operating it to form a bone tunnel. The bone core is removed from the coring reamer and a ligament replacement is attached to form the graft...**

**...USE - For arthroscopic surgery, especially anterior cruciate ligament reconstruction...**

14/3,K/12 (Item 12 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012124700 \*\*Image available\*\*

WPI Acc No: 1998-541612/199846

XRXPX Acc No: N98-421636

**Suction applying process for bone drilling and reaming operations - involves using a tool with cutting teeth that have cutting edge that pushes the tissue towards the back side of the tooth where suction is applied from a central passage in the tool**

Patent Assignee: KINAMED INC (KINA-N)

Inventor: CARIGNAN R; PRATT C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5814049	A	19980929	US 95549482	A	19951027	199846 B

Priority Applications (No Type Date): US 95549482 A 19951027

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5814049 A 8 A61B-017/16

**... involves using a tool with cutting teeth that have cutting edge that pushes the tissue towards the back side of the tooth where suction is applied from a central passage in the...**

**...Abstract (Basic):** The process involves cutting tissue from a bone with a **cutting tool** that has a number of cutting **teeth**, with each tooth having a cutting edge and a back side whereby the cutting edge removes tissue from the **bone** and then pushes it towards the back side of the cutting tooth. A suction force is applied to the back side of at least some of the number of the cutting **teeth** while cutting tissue which acts to remove the cut tissue...

**...A cutting tool for such a procedure has a stem (12) from which cutting **teeth** (24) extend outwards and which has a central longitudinal passage (44) that extends at least partway through the stem. An evacuation line (46) is connected...**

**...ADVANTAGE -** Prevents or minimises particulate matter entering the bloodstream from the cutting site during **surgery**. Prevents or minimises the particulate problem for different tools allowing the use of multiple tools during **surgery** without creating problems during the use of a particular tool...

14/3,K/13 (Item 13 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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011814414 \*\*Image available\*\*

WPI Acc No: 1998-231324/199821

XRXPX Acc No: N98-183170

**Surgical milling cutter for bone or tissue - has chip breaker groove that surrounds cutter head so as to form axial cutting-in teeth situated at intervals for chip removal via hollow shaft sleeve**

Patent Assignee: AESCULAP AG & CO KG (AESC-N)

Inventor: BLUST E

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 19639193	A1	19980416	DE 1039193	A	19960924	199821 B
DE 19639193	C2	20000706	DE 1039193	A	19960924	200035

Priority Applications (No Type Date): DE 1039193 A 19960924

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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DE 19639193	A1	6		A61B-017/16	
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DE 19639193	C2			A61B-017/16	
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Surgical milling cutter for bone or tissue...

...has chip breaker groove that surrounds cutter head so as to form axial cutting-in teeth situated at intervals for chip removal via hollow shaft sleeve

...Abstract (Basic): The **cutter** has a chip breaker groove (42) surrounding the cutting head (12) and dividing the blades (40) into individual axial **teeth** (50) that remove **bone** or bony tissue. The groove is at least as wide as the **teeth** (50), possibly twice as wide. The groove is however shallower than the **teeth** and may surround the head in a spiral shape, with the blades at an angle to the longitudinal axis of the head...

...and is driven by a motor. Additional detail includes the sidewalls (44,46) of the breaker groove. In operation, with the head under power, the **teeth** engage the bone or tissue which thus collects in the breaker groove spiral for removal through the sleeve specified for final recovery through suction openings...

Title Terms: **SURGICAL** ;

14/3,K/14 (Item 14 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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011266913 \*\*Image available\*\*

WPI Acc No: 1997-244816/199722

XRPX Acc No: N97-201953

Trepan for collection of cylindrical bone sections for grafting - is assembled from cutting tool and centring guide screwed to externally and internally threaded end of intermediate piece coupled to motor

Patent Assignee: MAIRE P (MAIR-I)

Inventor: MAIRE P

Number of Countries: 023 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9714361	A1	19970424	WO 96FR1587	A	19961011	199722 B
FR 2739773	A1	19970418	FR 9512411	A	19951016	199723
AU 9673039	A	19970507	AU 9673039	A	19961011	199735
EP 957781	A1	19991124	EP 96934894	A	19961011	199954
			WO 96FR1587	A	19961011	

Priority Applications (No Type Date): FR 9512411 A 19951016

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9714361	A1	F	21	A61B-017/16	
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Designated States (National): AU CA JP NO US

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC  
NL PT SE  
AU 9673039 A A61B-017/16 Based on patent WO 9714361  
EP 957781 A1 F A61B-017/16 Based on patent WO 9714361  
Designated States (Regional): BE CH DE DK ES FR GB IT LI NL SE  
FR 2739773 A1 A61B-017/16

... is assembled from cutting tool and centring guide screwed to externally and internally threaded end of intermediate piece coupled to motor

...Abstract (Basic): The equipment is manufactured from **surgical** steel and comprises a hollow cylindrical cutting tool (1) with 2-3 mm long **teeth** (2) around the centring and perforating point (14) of a guide (B). Diametrically opposed flats (5,13) are provided on the cylinder and guide for...

...USE - In any remedial or cosmetic plastic bone **surgery**, accurately sized grafts can be taken easily, rapidly and reliably with minimal trauma and with the possibility of repeated intervention at the same site...

14/3, K/15 (Item 15 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
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011010422 \*\*Image available\*\*  
WPI Acc No: 1996-507372/199651  
XRPX Acc No: N96-427530

Surgical cutter for bone and cartilage - has cutter head which has **peripheral blades** and helical chip breaking groove around it

Patent Assignee: AESCULAP AG (AESC-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 29616633	U1	19961114	DE 96U2016633	U	19960924	199651 B

Priority Applications (No Type Date): DE 96U2016633 U 19960924

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 29616633	U1	13	A61B-017/16	

Surgical cutter for bone and cartilage...

...has cutter head which has **peripheral blades** and helical chip breaking groove around it

...Abstract (Basic): The **cutter** head (12) has at least one chip breaker groove. This helically surrounds it and divides the radially protruding and axially extending blades (40) into separate **teeth** extending axially and biting into the **bone** or cartridge tissue...

...The chip breaker groove is at least, and possibly twice, as wide as the **teeth**, and is shallower than the blades. The head is held on the end of a shaft sleeve (14) through which the cut pieces of **bone** and or cartridge tissue are sucked up and removed. The motor-driven **cutter** head is partly enclosed peripherally by a mounting sleeve (18...)

...USE/ADVANTAGE - The **cutter** mills **bone** or cartilage tissue. It uses little force and has a high cutting rate...

Title Terms: **SURGICAL** ;

**14/3,K/16 (Item 16 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

010368831 \*\*Image available\*\*

WPI Acc No: 1995-270192/199536

XRPX Acc No: N95-207861

**Surgical instrument with two parallel rods - has rod coacting with ejection mechanism as retaining tubular member**

Patent Assignee: WEBA MEDIZINMECHANIK GMBH & CO (WEBA-N)

Inventor: WENZLER G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4445674	A1	19950803	DE 4445674	A	19941221	199536 B

Priority Applications (No Type Date): DE 94U1494 U 19940129

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

DE 4445674 A1 4 A61B-017/32

**Surgical instrument with two parallel rods...**

...Abstract (Basic): USE/ADVANTAGE - For **bone cutter, punch, etc.,** with a facility for collecting more cut tissue and easy ejection...

Title Terms: **SURGICAL** ;

**14/3,K/17 (Item 17 from file: 350)**

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

009987417 \*\*Image available\*\*

WPI Acc No: 1994-255128/199431

XRPX Acc No: N94-200930

**Bone face cutter e.g. in orthopaedic bone surgery - has escape slot beginning at perpendicular plane and extending generally axially from plane on slope from another edge toward second plane containing axis and radius**

Patent Assignee: CHAPMAN LAKE INSTR INC (CHAP-N)

Inventor: KISER M W; MCDANIEL J M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5336226	A	19940809	US 92928961	A	19920811	199431 B

Priority Applications (No Type Date): US 92928961 A 19920811

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5336226 A 8 A61B-017/00

**Bone face cutter e.g. in orthopaedic bone surgery - ...**

**...has escape slot beginning at perpendicular plane and extending generally axially from plane on slope from another edge toward second plane containing axis and radius**

...Abstract (Basic): The tool includes a body having one end for connection

to a power drive, and having another end for working on **bone** , a pilot device at the other end and defining a rotational axis perpendicular to the **bone** surface to be faced and having a pilot surface that is cylindrical about the axis, a **cutter** member secured to the pilot device and having a cutting edge lying in a plane perpendicular to the axis, the cutting edge beginning at an...  
...Title Terms: **SURGICAL** ;

**14/3,K/18 (Item 18 from file: 350)**  
DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

009964651 \*\*Image available\*\*  
WPI Acc No: 1994-232364/199428

XRPX Acc No: N94-183648

Surgical bone **mill-type** cutter - has **first side** surface of helical groove located perpendicularly to longitudinal axis of conical working section

Patent Assignee: KADYROV ZH N (KADY-I)

Inventor: KADYROV ZH N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1807867	A3	19930407	SU 4927856	A	19910416	199428 B

Priority Applications (No Type Date): SU 4927856 A 19910416

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
SU 1807867	A3	4	A61B-017/16	

Surgical bone **mill-type** cutter -

...Abstract (Basic): The cutter includes **teeth** (4) oriented to one side and fitted with external (5) and internal (6) sides crossing each other at an acute angle. Chips-discharging grooves arranged...

...The **cutter** connected via shank to a rotation drive (not shown) is brought into contact with a treated **bone** tissue. The **teeth** (4) remove wide chips from the **bone** surface, and the chips are shredded to small pieces by the grooves and moved into the **cutter** cavity via the slots...

Title Terms: **SURGICAL** ;

**14/3,K/19 (Item 19 from file: 350)**  
DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

009884997  
WPI Acc No: 1994-164912/199420  
XRPX Acc No: N94-129770

**Jaw cyst treatment - forming bone bed with width not less than 5-7 mm and depth of 5 mm and filling it with bone-glue composition**

Patent Assignee: SAMARA STOMATOLOGICAL POLYCLINIC (SAMA-R)

Inventor: BOGATOV A I; TRUNIN D A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1799553	A1	19930307	SU 4746844	A	19891017	199420 B

Priority Applications (No Type Date): SU 4746844 A 19891017

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
SU 1799553 A1 2 A61B-017/00

...Abstract (Basic): shaped or trapezoidal cut is made along a muco-gingival fold under a local anaesthesia. A trepanation window is formed by using a drill or **bone** pieces. A cyst envelope is removed, and **teeth** roots located within a cyst area are resected by a fissure drill. **Bone** cavity is worked by a milling **couther** and then treated by LF ultrasound via solutions of high-efficient antiseptics...

...USE/ADVANTAGE - In **surgical** stomatology. Reduced number of complications. Bul.9/7.3.93...

14/3,K/20 (Item 20 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

009853387 \*\*Image available\*\*

WPI Acc No: 1994-133243/199416

XRPX Acc No: N94-104553

Bone cutter **apparatus** - has **triangular** teeth in each group are arranged in **rows coaxially to each other**

Patent Assignee: KADYROV ZH N (KADY-I)

Inventor: KADYROV ZH N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1794448	A1	19930215	SU 4886474	A	19901017	199416 B

Priority Applications (No Type Date): SU 4886474 A 19901017

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
SU 1794448 A1 4 A61B-017/16

Bone cutter **apparatus**...

...has **triangular** teeth in each group are arranged in **rows coaxially to each other**

...Abstract (Basic): The triangular **teeth** in each group are arranged in rows coaxially to each other. The bases of the **teeth** (2) in the middle rows are equal to the intervals of these rows, and the bases of the **teeth** in the end rows (1) are less than the bases of the **teeth** in the middle rows. The **teeth** (1-5) of each group are made with equal intervals and displaced from each other to half their size...

...USE/ADVANTAGE - For cutting bone in **surgery**, ensuring the vibration stability of cutting bone tissue and reducing the friction of cutting. Bul.6/15.02.93...

14/3,K/21 (Item 21 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

008328197 \*\*Image available\*\*

WPI Acc No: 1990-215198/199028

XRXPX Acc No: N90-167015

**Hip bone cutting surgical instrument - working part with cuttin edge has bend along radius and its end bers disk cutter with sharp-ended one-side teeth**

Patent Assignee: SARAT TRAUMA ORTHOP (SATR-R)

Inventor: CHERFAS M D; SEMENOV V I; ZHADENOV I I

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1530177	A	19891223	SU 4336097	A	19871130	199028 B

Priority Applications (No Type Date): SU 4336097 A 19871130

**Hip bone cutting surgical instrument...**

**...working part with cuttin edge has bend along radius and its end bers disk cutter with sharp-ended one-side teeth**

**...Abstract (Basic):** In the **surgical instrument**, the working part (3) with cutting edge (4) has a bend along a **radius** and its end bears a disc cutter (5) with sharp-ended one-sided **teeth** (6), positioned at an acute angle to the axis of handle (1). Handle (1) and neck (2) with working part (3) are detachable...

**...ADVANTAGE -** This construction of the **surgical instrument** reduces the trauma involved in cutting through or dissecting a joint lip.

Bul.47/23.12.89. (2pp Dwg.No.1/3)

**...Title Terms:** **SURGICAL** ;

14/3,K/22 (Item 22 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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007350938

WPI Acc No: 1987-347944/198749

Related WPI Acc No: 1985-067972; 1985-073928; 1987-021193; 1987-149886; 1990-282017; 1991-245352; 1992-330858

XRXPX Acc No: N87-260689

**Arcuate surgical bone cutter - has adjustable radial arm with replaceable curved blades and shank attached to reciprocating saw blade**

Patent Assignee: COMPARETTO J E (COMP-I)

Inventor: COMPARETTO J E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4708133	A	19871124	US 85721640	A	19850410	198749 B

Priority Applications (No Type Date): US 85721640 A 19850410; US 85749475 A 19850630

Patent Details:

Patent No	Kind	La	Ng	Main IPC	Filing Notes
US 4708133	A		9		

**Arcuate surgical bone cutter -**

**...Abstract (Basic):** The **bone cutter** comprises a saw blade having a shank and an elongate body. The elongate body is curved in cross section and has saw **teeth** along an elongate edge. The shank is

capable of attachment to a reciprocating saw which makes up and down strokes. The shank smoothly articulates within a housing comprising a shaft for the shank articulation. The housing also comprises a hole within which a **bone** pin is placed. The hole capable of adjustable movement with respect to the shaft and the saw blade shank...  
...Title Terms: **SURGICAL** ;

14/3,K/23 (Item 23 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

004776446  
WPI Acc No: 1986-279787/198643  
XRAM Acc No: C86-120853

**Hydro-thermally stable ceramic compsn. - contg. zirconium oxide, yttrium oxide and cerium oxide system and alumina opt. replaced by alumina-magnesia spinel and/or mullite**

Patent Assignee: NORITAKE CO LTD (NTOK )

Inventor: HIRANO M; INADA H

Number of Countries: 008 Number of Patents: 012

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3610041	A	19861016	DE 3610041	A	19860321	198643	B
FR 2579199	A	19860926	FR 864074	A	19860321	198645	
JP 61219756	A	19860930	JP 8559154	A	19850322	198645	
JP 61219757	A	19860930	JP 8560503	A	19850325	198645	
GB 2174690	A	19861112	GB 867255	A	19860324	198646	
JP 62012662	A	19870121	JP 85149472	A	19850708	198709	
GB 2174690	B	19880608				198823	
US 4820666	A	19890411				198917	
JP 93045547	B	19930709	JP 8560503	A	19850325	199330	
JP 6219831	A	19940809	JP 85149472	A	19850708	199436	
			JP 93103651	A	19850708		
JP 95010746	B2	19950208	JP 85149472	A	19850708	199510	
JP 95064631	B2	19950712	JP 8559154	A	19850322	199532	

Priority Applications (No Type Date): JP 85149472 A 19850708; JP 8559154 A 19850322; JP 8559194 A 19850322; JP 8560503 A 19850325; JP 93103651 A 19850708

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3610041	A		73		
JP 93045547	B		6	C04B-035/48	Based on patent JP 61219757
JP 6219831	A		9	C04B-035/48	Div ex application JP 85149472
JP 95010746	B2		8	C04B-035/48	Based on patent JP 62012662
JP 95064631	B2		9	C04B-035/48	Based on patent JP 61219756

...Abstract (Basic): useful in abrasion-resistant ceramic screws for injection moulding machines for thermoplastic resins or ceramic, as hot extrusion tools for brass rods or Cu tubes, **surgical** scissors or knives which require repeated boiling for sterilisation. The ceramics may be used in cutting tools, industrial cutters, nozzles, combustion machinery, pumps, artificial **bones** , **teeth** or dental roots, precision tools, etc. The conversion of tetragonal to monoclinic crystal structure in the heat and under hydrothermal conditions is suppressed. The so

...Abstract (Equivalent): useful in abrasion-resistant ceramic screws for injection moulding machines for thermoplastic resins or ceramic, as hot extrusion tools for brass rods or Cu tubes, **surgical** scissors or

knives which require repeated boiling for sterilisation. The ceramics may be used in cutting tools, industrial cutters, nozzles, combustion machinery, pumps, artificial **bones**, **teeth** or dental roots, precision tools, etc. The conversion of tetragonal to monoclinic crystal structure in the heat and under hydrothermal conditions is suppressed. The so...

14/3,K/24 (Item 24 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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004346323

WPI Acc No: 1985-173201/198529

XRPX Acc No: N85-130169

Surgical **bone** cutting tool - has centre drill, inner cutter for forming end face, and outer cutter for forming shoulder

Patent Assignee: MEDICA-LEX (MEDI-N)

Inventor: LEVY A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2554709	A	19850517	FR 8318056	A	19831114	198529 B

Priority Applications (No Type Date): FR 8318056 A 19831114

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2554709	A		6		

Surgical **bone** cutting tool - ...

...has centre drill, inner cutter for forming end face, and outer cutter for forming shoulder

...Abstract (Basic): To form a joint in a bone, a **cutting tool** is used to shape one end of a **bone** (2) so that a cup shaped fitting can be applied. The other face of the fitting is concave, and the end of the other **bone** is convex to match it...

...The cutting tool has a handle (6) on a stem (5) with a hollow end holding a centring drill (12). The stem carries an inner **cutter** (8) with **teeth** (9) on its face of forming the flat end (13) of the **bone** . This is enclosed by a ring shaped **cutter** (10) with **teeth** (11) around its edge for cutting a shoulder (1) on the **bone** .

Title Terms: SURGICAL ;

14/3,K/25 (Item 25 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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004178170

WPI Acc No: 1985-005050/198501

XRPX Acc No: N85-003563

Surgical **bone** trepanning tool - having additional milling cutter with teeth inclined opposite to teeth of first cutter and with angular slots on cutter side walls

Patent Assignee: MEDINSTRUMENT TRUST (MEDI-R)

Inventor: ORENBULOV P P; REPIN V A; ZELENOV E S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1091920	A	19840515	SU 3540849	A	19830117	198501 B

Priority Applications (No Type Date): SU 3540849 A 19830117

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
SU 1091920	A	3		

Surgical bone trepanning tool...

...having additional milling cutter with teeth inclined opposite to teeth of first cutter and with angular slots on cutter side walls

...Abstract (Basic): Trepanning tool, comprising a hollow cylindrical body and a hollow cylindrical milling cutter with inclined teeth on its front face, a central shaft and a handle. To reduce the operating time, the tool has an additional milling cutter, the teeth of which are arranged in the opposite direction to that of the first cutter and the milling cutter side walls have inclined slots, whereas the slot incline of each milling cutter is opposite to the incline of its teeth and free ends of a coin, fastened to the body, are arranged in the intersection of the slots...

...The teeth have a L-form on the radial section and the thickness of each tooth is not less than the wall thickness sum of both milling cutter walls, while the teeth of one milling cutter are arranged between the teeth of the other cutter...

...ADVANTAGE - Application of the bone trepanning tool in surgery makes it possible to increase the cutting process performance and to reduce the duration of the operation by 1.5 to 2 times with better...

Title Terms: SURGICAL ;

14/3,K/26 (Item 26 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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004142627

WPI Acc No: 1984-288167/198446

XRPX Acc No: N84-215182

Wire breakage reduction method for orthopaedic surgery - comprises using radius cutters to remove external stress-raising corners from holes drilled in bone fragments

Patent Assignee: KLEIN H A (KLEI-I)

Inventor: NISSENBAUER I

Number of Countries: 013 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8404241	A	19841108	WO 84US690	A	19840503	198446 B
AU 8429654	A	19841119				198506
EP 141853	A	19850522	EP 84902151	A	19840503	198521
US 4590929	A	19860527	US 83491244	A	19830503	198624

Priority Applications (No Type Date): US 83491244 A 19830503

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 8404241	A	E 18		

Designated States (National): AU JP  
Designated States (Regional): AT BE CH DE FR GB LU NL SE  
EP 141853 A E  
Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

**Wire breakage reduction method for orthopaedic surgery - ...**

...comprises using radius cutters to remove external stress-raising corners from holes drilled in bone fragments

...Abstract (Basic): The method is for reducing the incidence of wire breakage in orthopaedic **surgery** where the wire passes through apertures drilled in bone fragments for effecting a wire connection between them during healing...

...Manipulation of an aperturing drill or the utilisation of novel **radius** cutters is utilised in effecting removal of the stress raising edges...

...The novel rotating **radius** cutters comprise arcuate cutting surfaces and integral drill or aperture positioner...

...Abstract (Equivalent): The wire used for binding together bone fragments is passed through apertures drilled in the bone. **Radius** cutters (20) are used to remove stress-raising edges from the drilled apertures. The cutters have curved cutting surfaces (25) and a concentric and pref...

...The **radius** cutters have stops (26) to limit penetration into the aperture. The pilot drill can be a non-cutting member. The cutters subtend an arc of...

...USE - As **cutter** for reducing the incidence of breakage of wire used for securing fractured **bone** fragments together...

...The method is for reducing the incidence of wire breakage in orthopaedic **surgery** where the wire passes through apertures drilled in bone fragments for effecting a wire connection between them during healing. The method comprises removing stress raising...

...Manipulation of an aperturing drill or the utilisation of novel **radius** cutters is utilised in effecting removal of the stress raising edges. The novel rotating **radius** cutters comprise arcuate cutting surfaces and integral drill or aperture positioner.

...Title Terms: **SURGICAL** ;

14/3,K/27 (Item 27 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
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002133834

WPI Acc No: 1979-F3766B/197925

**Hand-held cutter for bone surgery - has oscillating toothed blade with short movement to reduce friction and heating**

Patent Assignee: ARNEGGER R E (ARNE-I)

Inventor: ARNEGGER R E

Number of Countries: 003 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2849760	A	19790613				197925 B
CH 620853	A	19801230				198104
US 4252121	A	19810224				198111

DE 2849760 C 19820819

198234

Priority Applications (No Type Date): CH 7715251 A 19771209

**Hand-held cutter for bone surgery -**

...Abstract (Basic): The manually held power tool is for cutting solid material using oscillating **teeth**, esp. in **bone surgery**. Friction during cutting process is low and no heating takes place...

...Amplitudes of the movement components parallel to the **teeth** (31) row are not greater than double the spacing of adjacent **teeth**. The oscillating movements of the **teeth** additionally have a movement component normal to the row of **teeth**. The cutting blade is oscillated by a shaft (11).

...Title Terms: **SURGICAL** ;

14/3,K/28 (Item 28 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
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001282772

WPI Acc No: 1975-G6682W/197526

**Ultrasonic surgical cutting blade - is rounded with cutter teeth at point of contact with tissue to be cut**

Patent Assignee: MOSCOW BAUMAN TECH COLL (MOSB )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2361583	A	19750619				197526 B
DE 2361583	B	19771208				197750

Priority Applications (No Type Date): DE 2361583 A 19731211

**Ultrasonic surgical cutting blade...**

...is rounded with cutter teeth at point of contact with tissue to be cut

...Abstract (Basic): **Surgical** instrument for parting biological tissues with ultrasonics has a blade connected to the ultrasonics source for longitudinal vibrations. The working part of the blade is a metallic plate which is rounded and has **cutter teeth** at the point of contact with the tissues to be cut. Preferably the cross section of the cutting part of the blade is trapezoidal, so that the blade section directly contacting the **bone** tissue is thicker than that for parting the cartilage; the blade flanks do not run parallel, and on parting the tissue, the cut faces of

...Title Terms: **SURGICAL** ;

14/3,K/29 (Item 29 from file: 350)

DIALOG(R) File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

001218407

WPI Acc No: 1975-A2172W/197501

**Bone mill for producing controlled size fragments for surgical use - has hermetically sealed switches and unplugable relay box to allow autoclave sterilising**

Patent Assignee: US SEC OF NAVY (USNA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 3856219	A	19741224				197501 B

Priority Applications (No Type Date): US 72293735 A 19720929

**Bone mill for producing controlled size fragments for surgical use...**

...Abstract (Basic): **Bone** is fed into a vertical channel which is horizontally intersected by a toothed **cutter** bar. The **cutter** bar shearingly contacts the front edge of the **bone** supply channel shearing the **bone** into fragments. The **cutter** bar is driven by an air-cylinder driven by an external source of compressed air. A relay box on the **bone** mill may be unplugged from the mill and removed allowing the remainder of the mill to be sterilized in an autoclave. Pref. the **cutter** bar has a rectangular cross section and the face of the associated **teeth** form an angle of 85 deg. with the major dimension.

...Title Terms: **SURGICAL** ;

4/3,K/3

000921768      \*\*Image available\*\*

**Title: DISPOSITIF DE COUPE TIBIALE POUR LA POSE D'UNE PROTHESE TOTALE DE GENOU**

Patent Applicant/Assignee: CEDIOR; LECLERCQ

Applicant Address: CEDIOR (SOCIETE A RESPONSABILITE LIMITEE) - Deposant - RUE DU BREUIL ZI 25400 ETUPES (FR-25400); LECLERCQ SYLVAIN -

Deposant - 3 RUE DU REGIMENT CHAUTIERE 14990 BERNIERES SUR MER (FR-14990)

Inventor(s): LECLERCQ SYLVAIN - CO BALLOT SCHMIT 5 AVENUE ELISEE CUSENIER 25000 BESANCON (FR-25000); BOURALY JEAN PIERRE - CABINET BALLOT SCHMIT 5 AVENUE ELISEE CUSENIER 25000 BESANCON (FR-25000)

Legal Representative: CABINET BALLOT SCHMIT

Document Type: Patent / Brevet

Patent and Priority Information (Country, Number, Date):

Patent: FR 2731897 - 19960927

Application: FR 953654 - 19950322

Priority Application: FR 953654 - 19950322

Legal Status (Type, Action Date, BOPi No, Description):

Publication 19960927 9639 Date published

Search Report 19960927 9639 Date Search Report published

Claim Mod Modified claim

Grant 19970926 9739 Date granted

Abstract:

Dispositif de coupe tibiale pour la pose d'une prothese totale de genou en **chirurgie** osseuse. Selon l'invention, ledit dispositif comporte: - un moyen (1) de centrage a positionner dans un tibia (40) et pourvu d'un moyen (3) d...

...English Descriptors: CUTTER ;

5/3,K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0014822546 BIOSIS NO.: 200400213303  
Surgical reamer  
AUTHOR: Lechot Andre (Reprint)  
AUTHOR ADDRESS: Orvin, Switzerland\*\*Switzerland  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1280 (2): Mar. 9, 2004 2004  
MEDIUM: e-file  
PATENT NUMBER: US 6702819 PATENT DATE GRANTED: March 09, 2004 20040309  
PATENT CLASSIFICATION: 606-80 PATENT ASSIGNEE: Precimed S.A., Orvin,  
Switzerland PATENT COUNTRY: USA  
ISSN: 0098-1133 (ISSN print)  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

Surgical reamer

ABSTRACT: A **reamer** intended for **surgery**, made up of a hollow body of revolution provided with four **radial** arms which are perpendicular to each other so as to form a cross for fixing the reamer on a reamer holder. The cross formed by the **radial** arms is made up of a first diametral bar (1), a pin (2) passing through the first bar at its center and protruding each side of this bar, and two **radial** bars (3, 4) which have an axial hole via which each of these **radial** bars is engaged on the pin. With this construction, which is simple to produce, it is possible to omit welds and to eliminate the cleaning...

DESCRIPTORS:

METHODS & EQUIPMENT: **surgical reamer** --

5/3,K/2 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0014773784 BIOSIS NO.: 200400154541  
**Torque-transmitting coupling**  
AUTHOR: Lechot Andre (Reprint); White Patrick M; Bourgeois Pierre-David;  
Mahmoud Ezzedine  
AUTHOR ADDRESS: Orvin, Switzerland\*\*Switzerland  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1279 (2): Feb. 10, 2004 2004  
MEDIUM: e-file  
PATENT NUMBER: US 6689138 PATENT DATE GRANTED: February 10, 2004 20040210  
PATENT CLASSIFICATION: 606-80 PATENT ASSIGNEE: Precimed S.A., Orvin,  
Switzerland PATENT COUNTRY: USA  
ISSN: 0098-1133 (ISSN print)  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: According to the invention, a torque-transmitting assembly is described. A female coupling member defines a shape with a tapered bore. A **radially** flexible sleeve member has a wall with a tapered exterior surface, received within the bore, and an inner surface defining a through-bore. An elongated...  
...surface to contact the outer surface, inducing a super-elastic

activation in the shaft, simultaneously securing the members together in a fixed relative position. The **radially** flexible sleeve member has a plurality of collet fingers, which preferably contact the shaft at discrete locations. It is further preferred that the super-elastic...

...discrete contact thereby changing the cross-sectional shape of the shaft, which is generally non-circular, e.g., polygonal, in a further preferred form. A **surgical** device, e.g., a flexible **reamer**, is described as incorporating the present assembly.

DESCRIPTORS:

...METHODS & EQUIPMENT: **radially** flexible sleeve member

**5/3,K/3 (Item 3 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0014376893 BIOSIS NO.: 200300345612

**Method and apparatus for percutaneous osteoplasty**

AUTHOR: Marchosky J Alexander (Reprint)

JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1271 (4): June 24, 2003 2003

MEDIUM: e-file

PATENT NUMBER: US 6582446 PATENT DATE GRANTED: June 24, 2003 20030624

PATENT CLASSIFICATION: 606-167 PATENT COUNTRY: USA

ISSN: 0098-1133 (ISSN print)

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: positioned adjacent the target site of the bone. The bore has a diameter of at least about three millimeters. In addition, the apparatus includes a **rotary** cutter element removably attachable to the cannula for easing insertion of the cannula into position so the leading end of the cannula is positioned adjacent...

...the cutter element for releasably connecting the cutter element to the cannula during insertion of the cannula into position adjacent the target site of the **bone**. The apparatus also includes a handle attached to the **cutter** element for turning the cutter element to advance the leading end of the cannula into position adjacent the target site of the bone.

**5/3,K/4 (Item 4 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0014073134 BIOSIS NO.: 200300031853

**Connector for domed cutting tool**

AUTHOR: White Patrick M (Reprint); Fishbein Meyer

AUTHOR ADDRESS: 1213 Indian Trail Dr., Downingtown, PA, 19335, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1264 (1): Nov. 5, 2002 2002

MEDIUM: e-file

PATENT NUMBER: US 6475221 PATENT DATE GRANTED: November 05, 2002 20021105

PATENT CLASSIFICATION: 606-80 PATENT COUNTRY: USA

ISSN: 0098-1133 (ISSN print)

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The **surgical reamer** (20) has a hollow dome (24) with apertures (26) spaced apart arranged in arcs (28) extending from an apex (30) of the dome to the base portion (32) of the dome, and removable **teeth** (22) positioned in the apertures. Each cutting tooth (22) has a flange (52) that is aligned flush with the external surface of the dome (24...).

DESCRIPTORS:

METHODS & EQUIPMENT: **surgical reamer** --

5/3,K/5 (Item 5 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0013218034 BIOSIS NO.: 200100389873

Surgical reamer cutter

AUTHOR: Edwards Garland U (Reprint); Krause William R

AUTHOR ADDRESS: 13742 Village Ridge Dr., Midlothian, VA, 23113, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office Patents 1248 (2): July 10, 2001 2001

MEDIUM: e-file

PATENT NUMBER: US 6258093 PATENT DATE GRANTED: July 10, 2001 20010710

PATENT CLASSIFICATION: 606-80 PATENT COUNTRY: USA

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

Surgical reamer cutter

...ABSTRACT: relation to the axes or, alternatively, have a constantly changing path. A second pattern can follow a second, contiguous helical path that has a second **radial** orientation to the axis. The **teeth** can be formed from a sinusoidal wave form comprised of a continuous **radius** going from convex to concave, with each of the **teeth** having a predetermined pitch from the crest to the base. In another embodiment the crest of the **teeth** on the first flute is offset axially by a predetermined distance from the **teeth** on the adjacent flutes. The offset can be determined by dividing the pitch on each flute by the number of flutes. The cutting head can, in an alternate embodiment, have a notch within each of the flutes. The notch forms a pair of **teeth**, the crests of each of the **teeth** having either a substantially equal **radius** or a different **radius**, depending upon the placement of the notch.

DESCRIPTORS:

METHODS & EQUIPMENT: **surgical reamer cutter** --

1 5/3,K/6 (Item 6 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0013154471 BIOSIS NO.: 200100326310

Orthopaedic **glenoid** reamer

AUTHOR: Allard Randall N; Meyers John E (Reprint)

AUTHOR ADDRESS: Columbia City, IN, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office Patents 1247 (2): June 12, 2001 2001

MEDIUM: e-file

PATENT NUMBER: US 6245074 PATENT DATE GRANTED: June 12, 2001 20010612

PATENT CLASSIFICATION: 606-80 PATENT ASSIGNEE: Bristol-Myers Squibb Co.  
PATENT COUNTRY: USA  
ISSN: 0098-1133  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

Orthopaedic **glenoid** reamer

ABSTRACT: An **orthopaedic reamer** includes an elongate shaft and a cutting head attached to an end of the shaft. The cutting head has a diameter which is larger than the shaft. The cutting head has a **radial** perimeter and an axial cutting face with a plurality of cutting **teeth**. The cutting head has at least one visualization groove which extends **radially** inward from the **radial** perimeter. The at least one visualization groove allows a surgeon to visualize the cut bone during surgery.

DESCRIPTORS:

METHODS & EQUIPMENT: **orthopedic** glenoid **reamer** --

5/3,K/7 (Item 7 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0012569047 BIOSIS NO.: 200000287360  
**Hollow dome reamer with removable teeth**  
AUTHOR: Fishbein Meyer (Reprint); White Patrick M  
AUTHOR ADDRESS: Mahwah, NJ, USA\*\*USA  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1228 (1): Nov. 2, 1999 1999  
MEDIUM: e-file  
PATENT NUMBER: US 5976144 PATENT DATE GRANTED: November 02, 1999 19991102  
PATENT CLASSIFICATION: 606-80 PATENT ASSIGNEE: Vozeh Equipment Corp.,  
Franklin Lakes, NJ, USA PATENT COUNTRY: USA  
ISSN: 0098-1133  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

**Hollow dome reamer with removable teeth**

ABSTRACT: The **surgical reamer** has a hollow dome with apertures spaced apart arranged in arcs extending from an apex of the dome to the base portion of the dome, and removable **teeth** positioned in the apertures. Each cutting tooth has a flange that is aligned flush with the external surface of the dome, and a raised cutting...

DESCRIPTORS:

METHODS & EQUIPMENT: **surgical** **reamer** --...

...hollow dome, removable **teeth**, surgical instrument

5/3,K/8 (Item 8 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0012558257 BIOSIS NO.: 200000276570  
**Milling cutter for medical purposes**  
AUTHOR: Da Rold Orlando (Reprint)

AUTHOR ADDRESS: Solothurn, Switzerland\*\*Switzerland  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1227 (3): Oct. 19, 1999 1999  
MEDIUM: e-file  
PATENT NUMBER: US 5968049 PATENT DATE GRANTED: October 19, 1999 19991019  
PATENT CLASSIFICATION: 606-80 PATENT ASSIGNEE: Precifar S.A., Orvin,  
Switzerland PATENT COUNTRY: USA  
ISSN: 0098-1133  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: Milling **cutter** for medical purposes, in particular for use in **orthopedic** operations, which has a milling body made of thin-walled material. The milling cutter may take various forms and is provided on its surface with a number of milling **teeth** which are arranged systematically in terms of number and position. The arrangement and shape of the milling **teeth** are precisely defined. As a result, the milling cutter is an accurate tool which not only facilitates the work of the surgeon but also considerably...

5/3,K/9 (Item 9 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
(c) 2006 BIOSIS. All rts. reserv.

0005606611 BIOSIS NO.: 198783085502

**TWO CASES OF DISMEMBERED CORPSE**

AUTHOR: FUKUDA M (Reprint); YAMANOUCHI H; HONMA N; ONO M; SHIGENO R  
AUTHOR ADDRESS: DEP LEGAL MED, NIIGATA UNIV SCH MED, NIIGATA\*\*JAPAN  
JOURNAL: Research and Practice in Forensic Medicine 29 p147-152 1986  
ISSN: 0289-0755  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: JAPANESE

...ABSTRACT: found in the ground as skeletons. The both were identified as the same person because of the accordance with each section of bone, the peculiar **teeth** and cosmetic nasal operation. In Case 2, a 47-year-old woman was dismembered to six parts with a **cutter** knife, but any **bones** were not cut with saw. Each part was weighed and compared with standard values. There are many difficult problems such as personal identification, murderous weapon...

5/3,K/10 (Item 1 from file: 34)  
DIALOG(R) File 34:SciSearch(R) Cited Ref Sci  
(c) 2006 Inst for Sci Info. All rts. reserv.

13084689 Genuine Article#: 847RI No. References: 20  
Title: Lead stuck (frozen) in header: Salvage by bone cutter versus other techniques  
Author(s): Fisher JD (REPRINT) ; Lapman P; Kim SG; Ferrick KJ; Gross JN; Palma EC; Delvecchio A  
Corporate Source: Montefiore Med Ctr,Arrhythmia Serv, Div Cardiol, Dept Med,111 E 210th St/Bronx//NY/10467 (REPRINT); Montefiore Med Ctr,Arrhythmia Serv, Div Cardiol, Dept Med,Bronx//NY/10467; Albert Einstein Coll Med,Bronx//NY/10467(jfisher@montefiore.org)  
Journal: PACE-PACING AND CLINICAL ELECTROPHYSIOLOGY, 2004, V27, N8 (AUG), P 1136-1143

ISSN: 0147-8389 Publication date: 20040800  
Publisher: BLACKWELL FUTURA PUBLISHING, INC, 350 MAIN STREET, MALDEN, MA  
01248-5018 USA  
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

**Title: Lead stuck (frozen) in header: Salvage by bone cutter versus other techniques**

...Abstract: period we encountered this problem in six cases (1.7% of pulse generator replacements). The posterior portion of the header was clipped off using on **orthopedic bone cutter** in four cases. The cut was aligned with the deep end of the lead socket in the header. A metal rod was then used to...

...a vice. Motorized microtools were used to drill holes from the end of the header to the deep end of the socket; or with a **rotary saw** attachment to slice off the back of the header, allowing a retained lead to be pushed out. The latter was also done with a...

...held razor saw, and attempts were made with a scalpel. Lead removal in the clinical cases was accomplished quickly in the four cases using the **bone - cutter**, without trauma to the lead. Bench testing results varied. The **bone cutter** was the most efficient method for most brands, but was ineffective on one. The motorized tool was difficult to position, produced sprays of plastic particles...

...would have been risky in a clinical setting. The razor saw was difficult to use safely, or efficiently, except in some headers that resisted the **bone cutter**. The scalpel failed except in one "soft header" pacemaker. An **orthopedic bone cutter** is a useful tool for removing a retained lead from a pulse generator header. Different header designs and materials necessitate knowledge of several lead detachment...

5/3,K/11 (Item 2 from file: 34)

DIALOG(R) File 34:SciSearch(R) Cited Ref Sci  
(c) 2006 Inst for Sci Info. All rts. reserv.

10157637 Genuine Article#: 491WT No. References: 18

**Title: The assessment of cortical heat during intramedullary reaming of long bones**

Author(s): Frolke JPM (REPRINT) ; Peters R; Boshuizen K; Patka P; Bakker FC ; Haarman HJTM

Corporate Source: Vrije Univ Amsterdam, Acad Hosp, Dept Trauma & Accid Surg, POB 7057/NL-1007 MB Amsterdam//Netherlands/ (REPRINT); Vrije Univ Amsterdam, Acad Hosp, Dept Trauma & Accid Surg, NL-1007 MB Amsterdam//Netherlands/

Journal: INJURY-INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED, 2001, V32 , N9 (NOV), P683-688

ISSN: 0020-1383 Publication date: 20011100

Publisher: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: an approved mathematical model which can be used to determine the temperature gradient in cortical bone in the presence or absence of sensors. Methods: Artificial **bone** was used with an intramedullary heat source instead of a **reamer**. Temperatures were measured with thermocouples placed **radially** and axially in the cortical wall. This method with these two measurement positions were compared and used to

validate an approved mathematical model. This model...

...to determine the temperature gradient in cortical bone in the absence of sensors. Results: The measurement of the cortical temperature with the thermocouples in a **radial** position only reflects maximally 14% of the temperature of the reamer (calculated 55%). The measurement with the thermocouples in axial position reflects maximally 65% (calculated 70%) of the **reamer** temperature, which is similar to undisturbed **bone**. Conclusion: The measuring method with the thermocouples in a **radial** position cannot be recommended. It is likely that a much higher temperature is generated and conducted through reaming than has been assumed until now (C...).

5/3,K/12 (Item 1 from file: 73)

DIALOG(R) File 73:EMBASE

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00474399 EMBASE No: 1976029935

**Nonvegetable foreign bodies in the bronchopulmonary tract in children**

Al Naaman Y.D.; Al Ani M.S.; Al Ani H.R.

Dept. Thorac. Cardiovasc. Surg., Coll. Med., Univ. Baghdad Iraq

Journal of Laryngology and Otology ( J. LARYNGOL. OTOL. ) 1975, 89/3 (289-297)

CODEN: JLOTA

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH

A variety of 40 cases of non vegetable foreign bodies inhaled by children are presented. These include: coins, washers, pins, **reamers**, nails, screws, wires, pencil caps, ball point tips, worry beads, **bones**, broken **teeth**, small stones, and blades of broken foreign body forceps. The ages of the children ranged between 10 mth and 8 yr with the average age...

5/3,K/13 (Item 1 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

16095609 PMID: 15305964

**Lead stuck (frozen) in header: salvage by bone cutter versus other techniques. jfisher@montefiore.org.**

Fisher John D; Lapman Peter; Kim Soo G; Ferrick Kevin J; Gross Jay N; Palma Eugen C; Delvecchio Alexander

Department of Medicine, Division of Cardiology, Arrhythmia Service, Montefiore Medical Center, Bronx, New York 10467, USA.  
jfisher@montefiore.org

Pacing and clinical electrophysiology - PACE (United States) Aug 2004, 27 (8) p1136-43, ISSN 0147-8389 Journal Code: 7803944

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**Lead stuck (frozen) in header: salvage by bone cutter versus other techniques. jfisher@montefiore.org.**

... period we encountered this problem in six cases (1.7% of pulse generator replacements). The posterior portion of the header was clipped off using an **orthopedic bone cutter** in four cases. The cut was

aligned with the deep end of the lead socket in the header. A metal rod was then used to...

... a vice. Motorized microtools were used to drill holes from the end of the header to the deep end of the socket; or with a **rotary** saw attachment to slice off the back of the header, allowing a retained lead to be pushed out. The latter was also done with a...

... held razor saw, and attempts were made with a scalpel. Lead removal in the clinical cases was accomplished quickly in the four cases using the **bone - cutter**, without trauma to the lead. Bench testing results varied. The **bone cutter** was the most efficient method for most brands, but was ineffective on one. The motorized tool was difficult to position, produced sprays of plastic particles...

...would have been risky in a clinical setting. The razor saw was difficult to use safely, or efficiently, except in some headers that resisted the **bone cutter**. The scalpel failed except in one "soft header" pacemaker. An **orthopedic bone cutter** is a useful tool for removing a retained lead from a pulse generator header. Different header designs and materials necessitate knowledge of several lead detachment...

5/3,K/14 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2006 Dialog. All rts. reserv.

08635143 PMID: 2734959

[Machining of bone with rotary cutting burrs]

Die spanende Bearbeitung von Knochen mit Fraswerkzeugen.

Fuchsberger A

Institut fur Werkzeugmaschinen und Betriebswissenschaften, Technische Universitat Munchen.

Unfallchirurgie (GERMANY, WEST) Apr 1989, 15 (2) p59-72, ISSN 0340-2649 Journal Code: 7909168

Publishing Model Print

Document type: Journal Article ; English Abstract

Languages: GERMAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

[Machining of bone with rotary cutting burrs]

... medicine. Many different procedures are done with cutting burrs, reaching from orthopaedic surgery, traumatherapy up to oral surgery and dentistry. Accordingly are the variety of **rotary** cutting burrs. This paper describes the investigations of important cutting burrs such as rose-head burrs, diamond **cutters** and conventional **bone cutters** (Lindemann system). Main intent of this research is to study the thermal response, cutting quality and working accuracy of these instruments while boring and cutting...

5/3,K/15 (Item 1 from file: 144)

DIALOG(R) File 144: Pascal

(c) 2006 INIST/CNRS. All rts. reserv.

14402547 PASCAL No.: 00-0057589

Effect of experience on quality of canal preparation with rotary nickel-titanium files

BAUMANN M A; ROTH D A

University of Cologne, Germany  
Journal: Oral surgery, oral medicine, oral pathology, oral radiology, and  
endodontics, 1999, 88 (6) 714-718  
Language: English

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**Effect of experience on quality of canal preparation with rotary  
nickel-titanium files**

Objective. The purpose of this study was to compare inexperienced third-year dental students and experienced dentists with respect to their ability to use **rotary** nickel-titanium files, specifically with respect to root canal shape and instrument fracture. Study design. A total of 102 simulated endodontic plastic blocks were used...

...most instrumented at level 6 (0.23-0.27 mm). Conclusions. These findings show that both students lacking endodontic experience and experienced dentists used the **rotary** nickel-titanium files with success and achieved good root canal geometry.

English Descriptors: Preparation; Dental canal; Experience; Quality;  
Milling **cutter** ; Nickel; Titanium; **Surgeon** ; Dentist; Comparative study  
; Treatment; **Surgery** ; Technique; Human

? ds;show files

Set	Items	Description
S1	19	E2,E3
S2	147478	CUTTER? OR REAMER?
S3	9240	ORTHOPAED? OR ORTHOPED?
S4	16	S1 AND S2:S3
S5	16	S4 AND S2
S6	561419	CUTTING? OR REAMING?
S7	628022	S2 OR S6
S8	64880	BONE? ?
S9	71301	S3 OR S8
S10	1990	S9(10N)S7
S11	5	S1 AND S10
S12	856	ACETABULAR?
S13	101	S12 AND S7
S14	2063	S10 OR S13
S15	498611	ROTARY
S16	114053	RADIUS
S17	3	S14 AND S15 AND S16
S18	2	S17 NOT S11

File 347:JAPIO Nov 1976-2005/Oct (Updated 060203)

(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200614

(c) 2006 Thomson Derwent

File 371:French Patents 1961-2002/BOPI 200209

(c) 2002 INPI. All rts. reserv.

? logoff hold

01mar06 10:52:40 User259276 Session D2835.2

? ds;show files

Set	Items	Description
S1	71345	BONE? ? OR ORTHOPAED? OR ORTHOPED?
S2	175522	REAMER OR CUTTER OR (CUTTING OR REAMING) (3N) TOOL? ?
S3	824	S1(S)S2
S4	69512	SURGERY OR SURGICAL OR CHIRUG?
S5	0	CHIRUGERIE
S6	0	CHERUG?
S7	0	CHIRIU?
S8	234	S3 AND S4
S9	329923	TEETH? OR RADIUS? OR PUNCH???
S10	35	S8 AND S9
S11	1732309	PY=2004
S12	1644743	PY=2005
S13	149836	PY=2006
S14	29	S10 NOT S11:S13
S15	0	CHURUG?

File 347:JAPIO Nov 1976-2005/Nov(Updated 060302)  
(c) 2006 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD,UM &UP=200614  
(c) 2006 Thomson Derwent

File 371:French Patents 1961-2002/BOPI 200209  
(c) 2002 INPI. All rts. reserv.

? ds;show files

Set	Items	Description
S1	795	(ORTHOPAED? OR ORTHOPED? OR SURGICAL? OR CHIRUR? OR BONE? ? OR SURGEON? OR SURGERY?) (10N) (CUTTER? ? OR REAMER? ?)
S2	499413	ROTARY
S3	117010	RADIUS?
S4	150127	TEETH? OR TOOTHED?
S5	66	S1 AND S4
S6	9	S5 AND (S2 OR S3)
File 347:JAPIO Nov 1976-2005/Nov (Updated 060302)		
(c) 2006 JPO & JAPIO		
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200616		
(c) 2006 Thomson Derwent		
File 371:French Patents 1961-2002/BOPI 200209		
(c) 2002 INPI. All rts. reserv.		

? ds

Set	Items	Description
S1	556	(ORTHOPAED? OR ORTHOPED? OR SURGICAL? OR CHIRUR? OR BONE? ? OR SURGEON? OR SURGERY?) (10N) (CUTTER? ? OR REAMER? ?)
S2	159235	TEETH? OR TOOTHED?
S3	478873	RADIUS? OR RADIAL? OR ROTARY?
S4	20	S1 AND (S2 OR S3)
S5	15	RD (unique items)

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